

WHAT IS CLAIMED IS:

1. A method of determining a volume of fluid associated with a fluid storage and dispensing system, the volume of fluid having a height in the system, the system comprising measurement apparatus for measuring the height, the method comprising:

collecting a plurality of height measurement data from the measurement apparatus in a form readable by a computer;

storing the plurality of height measurement data in a compressed matrix format in a computer memory; and

performing regression analysis using the compressed matrix format to calculate the volume of fluid associated with the system.

2. The method of claim 1 wherein the collecting step is performed each time a portion of the volume of fluid is dispensed from the system.

3. The method of claim 1 wherein the collecting step includes transmitting the plurality of height measurement data to a host processor.

4. The method of claim 3 wherein transmitting the measurement data includes wireless transmission.

5. An apparatus for determining a volume of fluid associated with a fluid storage and dispensing system, the volume of fluid having a height in the system, the apparatus comprising:

measurement apparatus for measuring the height of the volume of fluid; and

a computer comprising a processing means for collecting a plurality of height measurement data from the measurement apparatus and a memory for storing the plurality of height measurement data in a compressed matrix format;

wherein the processing means performs regression analysis on the compressed matrix format to determine the volume of fluid associated with the system.

6. A method of determining a plurality of volumes of fluid, each of the volumes associated with one of a plurality of fluid storage and dispensing systems, each of the volumes having a height in its associated system, each of the systems including measurement apparatus for measuring the height of each of the volumes of fluid, the method comprising:

collecting a plurality of height measurement data from the measurement apparatus of each of the plurality of systems in a form readable by a computer;

storing the plurality of height measurement data in a compressed matrix format in a computer memory; and

performing regression analysis using the compressed matrix format to calculate the volumes of fluid associated with the systems.